EDITORIAL CORRESPONDENCE.

London, August 11, 1896.

The providential occurrence of a rainy day gives me the opportunity to make good my promise to write something about the museums and collections of England before my departure next Saturday for Paris.

The main collection of shells in the British Museum (Natural History) occupy a room (or gallery, as it is called) about 140 feet in length and 40 feet wide. The shells are arrayed in 52 beautiful mahogany cases, about 8 feet long and 4½ feet in breadth. They extend longitudinally in pairs, making four rows. The cases are of the horizontal type, with inclosed drawers below. The specimens are mounted on wooden tablets, which are covered with blue-gray paper, the smaller and fragile species being in glass-covered boxes which are also placed on tablets. On each side of the room are four smaller cases, which contain special collections, viz., some of the economic uses of shells, the pearl-bearing mollusks, eggs and egg-capsules of various species, Brachiopoda, some groups of the Cephalopoda, etc. At the entrance of the gallery there are two table cases, the one on the left containing pathologic monstrosities produced by disease and the reparation of injuries, the other sections of shells showing the internal structure and mode of growth, also specimens of rock and coral illustrating the boring power of mollusks and several kinds of wood perforated by various species of boring mollusks. Near the latter, against the wall, are four upright cases, two on each side; these contain the specimens too large for the cases containing the general collection. In one of these, protected by a glass cover, you see the great *Pleurotomaria adansoniana*, from Tobago. This shell a friend of mine saw in an office in Tobago, being used as a paper-weight! but, when we wrote for it, "the bird had flown." They are evidently not made for paper-weights. Two large valves of *Tridacna gigas*, 36 inches in length and weighing 310 pounds, also greet you on entering this magnificent room, and, if it was near dinner-time, they would probably increase your appetite (since they have become the trade-mark of one of our leading restaurants); but you would soon forget the "inner man" when you got among some of the conchological gems. I have spent many hours going over the great collection, and hunting up some of those old rarities we have read about since boyhood: *Cypraea princeps*

(=*C. valentia* Perry), *C. leucodon* Brod., *C. broderipi* Gray, *C. marginata*, *Conus gloria maris* and many of the beautiful Volutes; and looking at those strange forms obtained by the "Challenger" expedition: *Guivillea alabastrina* (Southern Ocean, 1600 fathoms), *Provocator pulcher* (105 fathoms off Kerguelen), *Volutolithes abyssicola* (150 fathoms off S. Africa, a genus so common in the Eocene), *Columbarium pagodoides* (410 fathoms off Sydney, Australia), *Lyria lutea* (275 fathoms off western New Zealand), *Oocorys sulcata*, and others. A shell that interested me very much was *Fulgur coarctatum* Sowb., two specimens from the Gulf of Mexico. It is undoubtedly a dextral *Fulgur perversum*. It reminds one of *F. rapum* from the pliocene of Florida, except that it has a prominent row of small, spine-like tubercles at the periphery. Like the few specimens of *T. carica* that are sinistral, we may only see such forms once in a lifetime. To describe the beauty and extent of the collection of land shells space would not permit, even if I could. The groups from the Philippines seem to be perfect, while the collection of *Amphidromus* recently monographed by Mr. Hugh Fulton, and which now contains his types, is a grand sight; one can hardly imagine the exquisite coloring of some of the species. Equally fine are the groups representing the African, South American and West Indian faunas. The *Nudibranchiata* are shown by an elegant series of glass models, while throughout the entire collection are wax, glass or alcoholic representatives of the soft parts of many of the principal genera.

But this is not the only collection of shells. "The alcoves round the central hall, five on each side, are devoted to the Introductory or Elementary Morphological Collection, designed to teach the most important points in the structure of the principal types of animal and plant life, and the terms used in describing them, all of which should be known before the systematic portion of the collection can be studied to advantage. This has been called the 'Index Museum.'" The Mollusca are in alcove No. VII; here is arranged an elegant series of anatomical preparations, a large series illustrating the forms of shells, and other series showing ornamentation, specific variation, muscular impressions, the hinge-teeth, opercula, etc.

The north end of the central hall is known as the Gallery of British Zoology. Here is a large collection of the Mollusca of the British Isles, occupying five of the horizontal and one upright case, the latter containing the large specimens.

I cannot close this brief description of the collection of Mollusca in this great Museum without giving you some idea of the vast col-

lection of fossil mollusks. The *Cephalopoda* occupy a room one-half the size of the shell gallery and containing 16 horizontal cases arranged transversely, while around the entire room are large wall cases. The *Gastropoda* and *Pelecypoda* occupy one-half of a room the same size as the shell gallery, including large wall cases along the side (the other half of the gallery being given to the fossil *Arthropoda*, *Echinodermata*, etc.). Then there is another gallery the size of this devoted to the *Cephalopoda*, that contains special collections of historical interest, or collections including a large number of types described and figured in standard monographs. The principal ones are the collection formed by William Smith, the pioneer of geology in England, the Searles Wood collection of Crag Mollusca, the Edwards collection of Eocene Mollusca, the Davidson collection of Brachiopoda, the types of Sowerby's "Mineral Conchology," and specimens belonging to the collection of Sir Hans Sloane, which was the nucleus of this great Museum.

There is also a very large collection of fossil Mollusca at the Museum of Practical Geology, which contains the material obtained by the Geological Survey of the United Kingdom, and here I wish to express my sincere thanks to Messrs E. A. Smith, B. B. Woodward and the officials of the British Museum generally, as well as to Messrs G. F. Harris, E. R. Sykes and others, who did so much to make my visit to London both pleasant and instructive.

I spent a few very pleasant hours in Cambridge with Rev. Prof. H. M. Gwatkin, who took great pleasure in showing some of his rare forms of radulæ. I cannot describe this collection, and one can only wonder at the time and careful work involved in making so many beautiful slides. It is undoubtedly the largest and finest collection of radulæ in the world. While at Cambridge, I also had the good fortune to meet Mr. A. H. Cook, of Kings College, who kindly showed me the "MacAndrews Collection." This is a collection that one could spend hours over, instead of the few minutes hastily spent in glancing at some of the important groups. The large suites showing the shell in all stages of development is a very noticeable feature, and shows what a good selection was made of the large amount of material evidently obtained by MacAndrew in his extensive dredgings. Another collection which the museum at Cambridge has recently obtained is the "Saul Collection," made by Miss Saul, of London. The collection is noted for its beautiful Cypræas. Here we see all of those mentioned as being in the British Museum,

except *Cyprœa leucodon;* while it contains such rarities as *Cyprœa barclayi, C. saulæ,* two specimens of *C. guttata,* large suites of *C. scottii, C. thersites, C. umbilicata* and very large and handsome series of the more common species. Both collections are still in cabinets of drawers and not publicly exhibited.

The collection of shells on exhibition in the Liverpool, or Derby Museum, as it is called, although not large, is exceptionally fine, and represents a great deal of care in its selection. A few species or genera of fossil forms closely allied to living mollusks are incorporated with the latter. Very interesting features of the museum are its aquaria, where both fresh water and marine mollusks may be seen alive. Through the kindness of Mr. Joseph A. Clubb, Assistant Curator, I spent several very pleasant hours in going over these collections.

CHAS. W. JOHNSON.

ISAAC LEA DEPARTMENT.

[Conducted in the interest of the Isaac Lea Conchological Chapter of the Agassiz Association by its General Secretary, Mrs. M. Burton Williamson.]

The summer vacation is finding a number of our members engaged in collecting and taking notes. We anticipate some fine reports next December.

The residence of Mrs. Laura N. Trowbridge has been changed from Whittier, California, to National City, San Diego County, Cal.

MARINE SHELLS ON THE SOUTHERN CALIFORNIA COAST.

[Extract from the report of Mrs. E. D. G. Campbell. From the Transactions of the Isaac Lea Conchological Chapter for 1895.]

My collecting has been done in San Pedro Bay and vicinity. Mr. Campbell hunting where I had not strength to go.

During January and February at Dead Man's Island have found a few fine specimens of *Astralium* (*Pomaulax*) *undosus* Wood and *Pteronotus festivus* Hds.

Upon the breakwater connecting Dead Man's Island with Terminal Island, *Acmæa scabra* Nutt., *A. spectrum* Nutt., *Littorina planaxis* Nutt. and *L. scutulata* Gld. were very plentiful. At extreme low tide in the drift, on the sandy beach along the northern part of the